

SPECIES	NUMBER	COUNTED BY	COLLECTION	LOCALITY
<i>Machaeranthera blephariphylla</i> (Gray) Shinnars	2n = 8	R. C. Jackson, KANU	<i>Jackson 2901</i> KANU	Durango, Mexico
<i>tagetina</i> Greene	n = 4	R. C. Jackson, KANU	<i>Jackson 2600</i> KANU	Hidalgo County, New Mexico
<i>Porophyllum scoparium</i> Gray	n = 12	R. C. Jackson, KANU	<i>R. C. &amp; S. W. Jackson 2701</i> KANU	Otero County, New Mexico
<i>Psilostrophe cooperi</i> (Gray) Greene	n = 16	R. C. Jackson, KANU	<i>R. C. &amp; S. W. Jackson 2693</i> KANU	Yavapai County, Arizona
<i>Sclerocarpus uniserialis</i> (Hook.) Benth. & Hook. f.	n = 12	B. L. Turner, TEX	<i>Turner et al. 3313</i> TEX	Jackson County, Texas
<i>Viguiera adenophylla</i> Blake	n = 17	C. B. Heiser, IND	<i>Stoutamire 2813</i> IND	North of San Luis Potosí-Nuevo Leon state line, Mexico
<i>deltoidea</i> var. <i>Parishii</i> (Greene) Vasey & Rose	n = 18	C. B. Heiser, IND	<i>Neher in 1958</i> IND	Near Palm Springs, Riverside County, California
<i>dentata</i> var. <i>brevipes</i> (DC.) Blake	n = 17	B. L. Turner, TEX	<i>Turner 4463B</i> TEX	Austin, Travis County, Texas
<i>porteri</i> (A. Gray) Blake	n = 17	C. B. Heiser, IND	From seed ( <i>Duncan</i> ) <i>Heiser 4561</i> IND	DeKalb County, Georgia
<i>stenoloba</i> Blake	n = 17	C. B. Heiser, IND	From seed <i>Tucker 3131</i>	Eddy County, New Mexico

## REVIEW

*Carex—Its Distribution and Importance in Utah.* By MONT E. LEWIS. Brigham Young University Science Bulletin, Biological Series 1(2):1-43. 1958. \$1.00.

"The purpose of this report is to bring available information concerning the *Carex* species in Utah up to date." With these modest words Mr. Lewis of the United States Forest Service intermountain regional office in Ogden, Utah, introduces his excellent and original study of the identification, distribution, ecology, and grazing values of Utah carices.

Since the only Utah flora, namely Tidestrom's, is now over a third of a century old, a modern study such as this is most welcome. It is doubly welcome in that it comes from a representative of the federal organization which spends more man-hours interpreting the native plant cover of Utah than any other group. It is gratifying that a man primarily concerned with administration should take the time to produce a work such as this.

The report contains a diagrammatic summary of the mountain physiographic provinces of Utah and of their zonal belts of vegetation. Most interesting floristic, vegetational, and ecological problems are evident from the scattered occurrence of *Pinus ponderosa*, a local intrusion of *Pinus contorta* into the state, a varying amount of pinyon-juniper vegetation in different provinces, a constantly present but supposedly seral aspen-fir belt, and scattered alpine vegetation. Descriptions as well as explanations of most of these phenomena are still lacking in the botanical literature. For subsequent editions we hope Mr. Lewis will find time and opportunity to prepare altitude scales to this zonal vegetation diagram and to characterize the plant communities and floras concerned.

Although the physiographic units used certainly make far more sense for describing the distributions of plants within Utah than do county units, floristic units would be best of all. Do the physiographic divisions of Utah coincide with floristic divisions? For those unfamiliar with floras using floristically defined areas to describe plant distributions, reference may be made to the "Flora of the USSR" [cf. Stearn's paper in the New Phytologist 46:61-87, 1947. Note that a new map appears in Volume 18 (1952) of the Flora USSR] and to recent local floras such as those of Tadzhikistan, Kazakstan, Central Siberia, Leningrad and Murmansk regions, etc. Hylander's new Scandinavian flora and the new Greenland flora employ similar schemes.

Illustrations of named *Carex* species explain the terminology used in the keys. These keys do not exactly duplicate Mackenzie's and are easier to use for identification to section and to species. They require ripe perigynia; so do most *Carex* keys. For this reason A. Neumann's key to the carices of northwest Germany in vegetative condition deserves mention (Mitteil. Floristischsoziologischen Arbeitsgemeinschaft 3:44-77, 1952). Unfortunately, of the 126 taxa keyed by Neumann, only 6 are found among Lewis' 102 taxa. The species descriptions are pertinent and comparable; distinguishing features are frequently mentioned, and here the author uses his field experience to great advantage.

Distribution statements are short but probably adequate, with the Utah areas given in as full detail as present knowledge permits. This present knowledge is so poor as to make a phytogeographer weep, but one result of Lewis' work will be a rapid advance in our knowledge of where various carices do grow. The ecological data are excellent and far better than anything else available. Writers of extra-Utah floras can most profitably use these data for comparisons. Finally, all interested in range management will treasure Lewis' unique notes on forage values.

The monograph closes with an excellent list of local references, a glossary, an index, and a table summarizing for all species their distribution by physiographic provinces, the mountain belt of vegetation in which they occur, their habitat within this belt, their abundance, and geographical distribution.—JACK MAJOR, Botany Department, University of California, Davis.

## NOTES AND NEWS

EDWARD LEE GREENE CORRESPONDENCE—Persons interested in the botanical history of the western United States may find material of value in the correspondence of Edward Lee Greene now in the archives of the University of Notre Dame. This file includes letters to Greene over a period of forty or more years of his botanical career. These range from single letters commenting on specimens or requesting information to extensive correspondence from many of the notable figures in botany. This material is available to scholars able to visit the University of Notre Dame. Also microfilm copies of letters can be supplied at about four cents per picture and photostat copies at about forty cents per copy.

The following list includes the names of most correspondents whose letters are in the Greene files at Notre Dame. It is not necessarily complete. Some of the